

C --57. A programmable infusion system, as in claim ⁷³~~56~~,
further comprising:

implanted reservoir means for containing medication.
which is supplied to the pumping means, and

implanted means for permitting the flow of medication
from the reservoir means only to the pumping means and
for preventing the leakage of injurious doses of medi-
cation from the reservoir.--

--58. A programmable infusion system, as in claim 57,
further comprising:

means for injecting medication into the reservoir means,
and

programming means for providing commands to the medica-
tion injection means indicating when injection of medi-
cation into the reservoir is appropriate.--

--59. A programmable infusion system, as in claim 58,
further comprising:

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implanted means for sensing the ^{selectively} ~~unsafe~~ ^{improper} operation of ~~any~~ ^{the}
implanted control means and ^{of} the flow permitting and
leakage preventing means--.

--60. A programmable infusion system, as in claim 59,
further comprising:

implanted means for monitoring the medication pressure
in the reservoir means.--

C --61. A programmable infusion system, as in claims ⁷³~~55~~,
59, or 60, further comprising:

implanted, programmable means for indicating when unsafe
operation is sensed.--

C --62. A programmable infusion system, as in claims ⁷³~~56~~,
or 60, further comprising:

means for recording the number of times pumping is
effected by the pumping means.--

--63. A programmable infusion system, as in claims 62,
further comprising:

B patient controlled means, coupled to the telemetry
means, for generating commands for pumping, such commands
effecting pumping provided that the preset limits in the
control means are not exceeded.--

--64. A programmable infusion system, as in claim 63,
further comprising:

implanted means for supplying power to all implanted
means.--

--65. A programmable infusion system, as in claim 64,
further comprising:

means, external to the body and coupled to the power
supplying means, for restoring the power level of the
power supplying needs as required.--

--66. A programmable infusion system, as in claim 65, wherein the implanted control means disallows pumping which exceeds a preset dosage limit during a fixed window of time which runs continuously.--

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--67. A programmable infusion system, as in claim ⁸¹~~56~~, wherein the ~~implanted~~ control means disallows pumping which exceeds a preset dosage limit during a fixed window of time which runs continuously.--

--68. A programmable infusion system, as in claim 66, wherein the amount of medication pumped by the pumping means is controlled by a pressure limit in the pumping means.--

--69. A programmable infusion system, as in claim 66, further comprising:

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outlet means, at the output of the pumping means, for providing a desired output flow of medication from the pumping means.--

--70. A programmable infusion system, as in claim 69, wherein the pressure in the reservoir means is maintained at a level lower than the surrounding pressure in the body.--

--71. A programmable infusion system, as in claim 70, further comprising:

programming means, coupled by the telemetry means to the programmable unsafe operation indicating means, for providing a distinct indicator output for various unsafe conditions.--

--72. A programmable infusion system, as in claim 61, wherein the means for indicating unsafe operation comprises means for providing a subcutaneous alarm signal.--